of multiplying itſelf by Sprigs or Suckers. Nothing can exceed the Sagacity with which he has conducted thoſe Experiments that have led him into the Knowledge of things ſo very wonderful and ſurpriſing, that they may truly be ſaid to exceed all that Natural Hiſtory had yet afforded of this Sort.

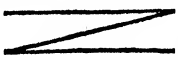
III. *An Account of an extraordinary Caſe of the* Bones *of a* Woman *growing ſoft and flexible; communicated to the* ROYAL SOCIETY *by Mr.* Sylvanus Bevan, F. R. S.

Read May 5. 1743.

THE Wife of one *B. S.* in the Year 1738. was taken with a Diabetes, with the uſual Symptoms, *viz.* A frequent and copious Diſcharge by Urine, a gradual Waſting of the Body, a hectic Fever, with a quick low Pulſe, Thirſt, great Pains in her Shoulders, Back, and Limbs, and Loſs of Appetite. She continued in this manner Two Years, (notwithſtanding the Uſe of Medicines generally preſcribed in ſuch Caſes) much emaciated; at which time ſhe was attacked with an Intermittent, which ſoon left her; after which the Diabetes gradually decreaſed, ſo that in ſome few Months ſhe was intirely free from that Diſorder, but the Pains in her Limbs ſtill continued. She recovered her Appetite very well, breathed free and eaſy, and her Hectic very much leſſened, though ſhe had ſome Appearance of it at times.

About Eighteen Months ago, ſhe had ſuch a Weakneſs and Pains in her Limbs, that it confined her to her

her Bed altogether; and in a few Months her Bones in her Legs and Arms felt ſomewhat ſoft to the Touch, and were ſo pliable, that they were bent into a Curve; but, for ſeveral Months before her Death, they were as limber as a Rag, and would bend any way, with leſs Difficulty than the muſcular Parts of a healthy Perſon's Leg, without the Interpoſition of the Bones.

The 12th of *April* 1742. after a long and tedious Illneſs, ſhe died, near the Age of Forty: And, having the Conſent of her Friends, I had the Curioſity to examine more particularly into the ſeveral Matters before-mentioned. Upon raiſing the *Cutis*, I found the *Membrana Adipoſa* much thicker than I expected in a Perſon ſo much emaciated: The *Sternum* and Ribs, with their Cartilages, were very ſoft; and all the cartilaginous Parts of the Ribs, at their Articulations, from the *Clavicle* downwards, were doubled over one another on the Left Side, about an Inch, in this Form  , only flatter. Upon raiſing the *Sternum*, I found the Lungs adhered very cloſe to the Ribs, for Four or Five Inches on each Side; but were more looſe and flaccid than uſual, and much leſs in Size: Her Heart was of the common Bigneſs. Upon viewing her Liver, I found it at leaſt a Third Part bigger than common; and her Spleen was about an Inch and a half in the longeſt Part, and a Quarter thick: The *Inteſtines* were very much inflated.

She had Appearances of ſeveral *Anchyloſſes's* formed in the ſmall Joints, *viz.* carpal and metacarpal Bones; but, upon laying them open, I found them only like a thin Shell: The cartilaginous *Epiphyſes* of the Bones were intirely diſſolved, and

no Parts of the Heads of the Bones remaining, but an Outſide, not thicker than an Egg-ſhell.

Upon making Inciſions in her Legs and Arms, Five or Six Inches long, I found the outer *Laminæ* of the Bones ſoft, and become perfectly *membranous*, about the Thickneſs of the *Peritoneum*, containing (inſtead of a bony Subſtance) a Fluid of the Conſiſtence of Honey, when it is thick, of a reddiſh Colour, not at all diſagreeable to the Smell: There was no Appearance of any Bones in her Leg and Arms, except near the Joints, which were in part diſſolved, and what remained were very ſoft, and full of Holes, like a Honey-comb: Alſo the Bones of the Head would eaſily give way to the Preſſure of the Finger.

It is remarkable, that thoſe Parts of the Bones that are the moſt compact and hard, were firſt diſſolved, while their Heads, which are more ſpongy and ſoft, had not ſo intirely loſt their Subſtance.

When ſhe was in Health, ſhe was Five Feet high, as I am informed by her Husband: I meaſured her after her Death, and ſhe was but Three Feet Seven Inches in Length, though all her Limbs were ſtretched out ſtrait, which is Seventeen Inches ſhorter than ſhe was in her Health: The Bones, which ſerve as Levers for the Muſcles to act upon, being diſſolved, theſe had nothing to keep them extended in their uſual Poſition.

The Perſon was under the Care of Dr. *Cadwallader* of *Penſilvania*.